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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: STEROID RECEPTOR MODULATION OF GENE EXPRESSION

(57) Abstract: The present invention provides a novel steroid inducible expression system in a non-mammalian host cell (e.g., fungal) that is independent of metabolic and development regulation. The human estrogen receptor gene expressed in *Aspergillus*, under a constitutive promoter, was shown to be functional. A reporter gene containing regulatory sequences from *Aspergillus*, yeast and a synthetic sequence containing the estrogen receptor binding sites (EREs) was expressed in response to a hormone derivative inducer. In the absence of the inducer, the promoter is silent and depending on the type of construct and inducer concentration the expression level can be modulated from moderate to very strong.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/41357

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 1/15, 1/19, 15/80, 15/81; C12P 21/02
 US CL : 435/69.1, 254.2, 254.22, 254.23, 254.3, 254.4, 254.5, 254.6, 254.7, 254.8, 320.1
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 435/69.1, 254.2, 254.22, 254.23, 254.3, 254.4, 254.5, 254.6, 254.7, 254.8, 320.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,817,503 (CHAMBON ET AL) 06 October 1998 (06.10.1998), see entire document, especially columns 3, 5, 6, and 9.	8-12 and 14-19
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Y	US 4,859,609 (DULL ET AL) 22 August 1989 (22.08.1989), see entire document, especially column 10.	1-5, 7
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A		6, 13
Y	US 5,216,126 (COX ET AL) 01 June 1993 (01.06.1993), see entire document, especially column 26.	1-5, 7
Y	US 6,159,705 (TRUEHEART ET AL) 12 December 2000 (12.12.2000), see entire document, especially columns 6 and 15-16.	1-5, 7

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"B"	earlier application or patent published on or after the international filing date
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"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

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INTERNATIONAL SEARCH REPORT

PCT/US03/41557

Continuation of B. FIELDS SEARCHED Item 3:

EAST (USPAT, USPGPUB, EPO, JPO, Derwent databases), Dialog OneSearch (biotech databases)
search terms: steroid, fungus, fungi, yeast?, estrogen receptor, filamentous, receptor?